APPENDIX A: SUMMARY OF REVIEWED STUDIES – LDLT DONORS

Study/Country	Study Design	LDLT Graft Type	No. of Donors	Donor Age	Length of Follow-up	Study Period
Chen et al. (1998) [62] Taiwan	Retrospective case series study	LLS (n=12) LLS plus part of segment IV (n=2)	14	Mean 32.6 yrs	Not stated	06/1994 to 10/1997
Crowley-Matoka et al. (2004) [65] USA	Retrospective case series study	LL (n=12) LLS (n=3)	15	Mean 29.9 yrs	Range 3 to 10 years	11/1989 to 11/2000
Farmer et al. (2001) [63] USA	Retrospective non-randomised comparative study; mixed concurrent/ historical controls	LLS	34	Mean 30.1 yrs	Not stated	1992 to 01/1999
Fujita et al. (2000)* [64] Japan	Case series study; unclear if prospective/ retrospective	LLS	282	Mean 31.8 yrs	Not stated	06/1990 to 05/1999
Hashikura and Kawasaki (2004) [95] Japan	Case series study; unclear if prospective/ retrospective	LL with or without segment I	16	Not stated	Not stated	06/1990 to 11/2002
Jabbour et al. (2001) [96] USA	Case series study; unclear if prospective/ retrospective	LLS	10	Not stated	Not stated	09/1998 to 07/2000
López-Santamaria et al. (2003) [97] Spain	Case series study; unclear if prospective/ retrospective	LLS (n=23) LL (n=1) RL (n=2)	26	Not stated	Not stated	Not stated
Miller et al. (2001) [70] USA	Case series study; unclear if prospective/ retrospective	LLS	47	Not stated	Not stated	1993 to 10/2000
Morimoto et al. (1995) [66] Japan	Case series study; unclear if prospective/ retrospective	LLS (n=80) LL (n=31) RL (n=1)	112	98.2% between 21 and 50 yrs	6 months	06/1990 to 07/1994
Özçay et al. (2002) [67] Turkey	Retrospective case series study	Not stated	10	Range 20 to 50 yrs	Not stated	1994 to 2001

LDLT – living donor liver transplantation; LL – full left lobe (segments II to IV); LLS – left lateral segment (segments II and III); RL – right lobe (segments V to VIII)
*May include patients from Morimoto et al. [66] in its sample

Study/Country	Study Design	LDLT Graft Type	No. of Donors	Donor Age	Length of Follow-up	Study Period
Otte et al. (1999) [41] Belgium	Case series study; unclear if prospective/ retrospective	LLS (n=52) LLS plus part of segment IV (n=8) LL (n=3)	63	Range 19 to 54 yrs	Not stated; however 38/40 donors had follow-up ranging from <6 months to >24 months for psychological outcomes	07/1993 to 09/1998
Révillon et al. (1999) [68] France	Retrospective case series study	LLS (n=12) LL (n=14)	26	Not stated	1 year	11/1994 to 03/1998
Saing et al. (2002) [61] China	Case series study; unclear if prospective/ retrospective	Not stated	22	Not stated	Not stated	09/1993 to 12/2001
Sterneck et al. (1995) [69] Germany	Case series study; unclear if prospective/ retrospective	LLS (n=34) LL (n=1)	35	Not stated	1 year	10/1991 to 06/1994

LDLT – living donor liver transplantation; LL – full left lobe (segments II to IV); LLS – left lateral segment (segments II and III)

Summary of Comparative Studies – Recipients

Study/Country	Study Design	Graft Type	No. of Patients	Recipient Age Median (range)/ Mean (SD)	Length of Follow-up Median (range)/ Mean (SD)	Study Period
Broering et al. (2001) [16] Germany	Non-randomised comparative study with concurrent controls; unclear if prospective/ retrospective	CAD split liver (LLS) LDLT (LLS)	49 (14 ex situ, 35 in situ) 43	Median 1.3 yrs (0.3 to17.0) Median 0.8 yrs (0.3 to 9.9)	Median 35 months (5 to 61)	04/1996 to 12/2000
Buell et al. (2002) [57] USA	Retrospective non-randomised comparative study; mixed concurrent/ historical controls	CAD whole liver LDLT	275 grafts 118 grafts	< 18 yrs (Pers. Comm. J. Buell)	Not stated	1988 to 07/2000
de Ville de Goyet (1999) [71] Belgium	Retrospective non-randomised comparative study; mixed concurrent/ historical controls	CAD whole liver CAD reduced size (LL, LLS, LLC) CAD split liver (LL, LLS, RL) LDLT	177 grafts 186 grafts 27 grafts 53 grafts	Median 2.2 yrs (0.3 to 16.4)	≤ 4 months	03/1984 to 12/1997
Diem et al. (2003)* [10] Belgium	Retrospective non-randomised comparative study; mixed concurrent/ historical controls	CAD whole liver CAD reduced size (LLS or LL) CAD split liver (LLS) LDLT	125 128 16 59	Median 1.5 yrs (0.4 to 14.5)	Up to 15 yrs for some patients	04/1984 to 07/2000
Emond et al. (1996) [98] USA	Retrospective non-randomised comparative study; mixed concurrent/ historical controls	CAD whole liver LDLT	23 grafts 20 grafts	< 15 yrs (mean 4 yrs, range 0 to 14)	Not stated	7/1992 to 12/1995

CAD – cadaveric; LDLT – living donor liver transplantation; LL – full left lobe (segments II to IV); LLC – full left lobe plus caudate lobe (segments I to IV); LLS – left lateral segment (segments II and III); RL – right lobe (segments V to VIII); SD – standard deviation
*May include patients from de Ville de Goyet et al. [71] in its sample

Study/Country	Study Design	Graft Type	No. of Patients	Recipient Age Median (range)/ Mean (SD)	Length of Follow-up Median (range)/ Mean (SD)	Study Period
Farmer et al. (2001)[†] [63] USA	Retrospective non-randomised comparative study; mixed concurrent/ historical controls	CAD split liver (LLS) LDLT (LLS)	39 (in situ) 34	Median 9.8 yrs Median 11.1 yrs	Median 15.7 months (1 to 65)	02/1984 to 01/1999
Goss et al. (1996) [8] USA	Retrospective non-randomised comparative study; mixed concurrent/ historical controls	CAD whole liver CAD reduced size LDLT	155 24 11	Median 1.4 yrs	Median 3.2 yrs	07/1984 to 02/1996
Reding et al. (1998)[‡] [74] Belgium	Non-randomised comparative study; concurrent controls; unclear if prospective/ retrospective	CAD reduced size (LLS or LL) LDLT (LLS or LL)	13 grafts (10 patients) 15 grafts (15 patients)	Median 1.2 yrs (0.6 to 6.4) Median 2.2 yrs (0.6 to 7.8)	3 months	03/1994 to 05/1995
Roberts et al. (2004) [72] USA	Retrospective analysis of data from the Scientific Registry of Transplant Recipients	CAD whole liver LDLT	3325 541	Range 0 to 16 yrs	1 year	1989 to 2000
Sindhi et al. (1999)[§] [73] USA	Retrospective analysis of data from the Organ Procurement and Transplantation Network registry	CAD whole liver CAD reduced size CAD split liver LDLT	2636 438 89 246	Range 0 to 17 yrs	1 year	1990 to 1996
Yersiz et al. (2003)[¶] [45]	Retrospective non-randomised comparative study; mixed concurrent/ historical controls	CAD whole liver LDLT (LLS)	207 43	Median 1.5 yrs (0.1 to 7.0) Median 0.9 yrs (0.1 to 13.3)	5 years	9/1991 to 02/2003

CAD – cadaveric; LDLT – living donor liver transplantation; LL – full left lobe (segments II to IV); LLS – left lateral segment (segments II and III); SD – standard deviation
[†]May include patients from Goss et al. [8] in its sample
[‡]May include patients from de Ville de Goyet et al. [71] and Diem et al. [10] in its sample
[§]May include patients from Roberts et al. [72] in its sample
[¶]May include patients from Farmer et al. [63] and Goss et al. [8] in its sample

Summary of LDLT Donor Outcomes

Donor Assessment	
Cholangiography	100% (n=14) [62] 100% (n=282) [64] 100% (n=47) [70] 100% (n=26) [68] Selected patients only (n=35) [69]
Angiography	100% (n=14) [62] 100% (n=11) [67] 100% (n=26) [68] 100% (n=35) [69] 6.3% (n=112) [66] Selected patients only (n=63) [41]
Percutaneous liver biopsy	100% (n=25) [67]
Ineligible to donate for medical/surgical reasons	40.6% (n=106) [41] 25.7% (n=35) [68] 73.2% (n=56) [67] 24.7% (n=73) [69]
Perioperative Outcomes	
Operative time (minutes)	Mean 227 (n=34) [63] Median 330 (range 258 to 390) (n=10) [96] Range 300 to 480 (n=26) [68] Mean 270 (n=35) [69]
Blood loss (mL)	Mean 580.1 (n=34) [63] Mean 70 (range 20 to 120) (n=14) [62]
Blood transfusion required	0% (n=14) [62] 0% (n=282) [64] 0% (n=10) [96] 2.1% (n=47) [70] 3.9% (n=26) [68] 57.1% (n=35) [69]
Hospital stay (days)	Mean 7.8 (range 5 to 14) (n=14) [62] Mean 7.0 (n=10) [67] Median 5 (range 5 to 7) (n=10) [96] Median 6 (range 5 to 21) (n=26) [97] Median 7 (range 6 to 12) (n=63) [41] Mean 8 (range 6 to 13) (n=26) [68] Range 4 to 8 (n=22) [61] Mean 13.8 (range 6 to 34) (n=35) [69]
Complications	0% (n=34) [63] 0% (n=22) [61]

Postoperative Outcomes	
Mortality	0% (n=34) [63] 0% (n=14) [62] 0% (n=282) [64] 0% (n=10) [67] 0% (n=47) [70] 0% (n=112) [66] 0% (n=22) [61] 0% (n=16) [95] 0% (n=15) [65] 2.9% (n=35)* [69]
Serious complications	0% (n=10) [67] 0% (n=26) [97] 0% (n=47) [70]
Bile leak	9.9% (n=282) [64] 0% (n=10) [96] 3.6% (n=112) [66] 6.4% (n=63) [41]
Bile duct injury	2.9% (n=35) [69]
Incisional hernia	6.4% (n=63) [41] 5.7% (n=35) [69]
Perihepatic fluid collection requiring drainage	3.9% (n=26) [68]
Ileus	1.8% (n=282) [64]
Gastric dysmotility	6.7% (n=15) [65]
Small bowel obstruction	2.1% (n=47) [70]
Gastritis/peptic ulcer	1.4% (n=282) [64] 1.5% (n=67) [66]
Duodenal ulcer	4.5% (n=67) [66] 5.7% (n=35) [69]
Cholecystitis	0.4% (n=282) [64]
Burn	0.4% (n=282) [64]
Peritonitis	0.4% (n=282) [64]
Granulocytopenia	0.4% (n=282) [64]
Pancreatitis	0.4% (n=282) [64]
Transient pleural effusion	3.2% (n=63) [41]
Ulnar nerve compression	1.6% (n=63) [41]
Wound infection	3.2% (n=282) [64] 1.8% (n=112) [66] 5.7% (n=35) [69]
Reoperation	0% (n=10) [96] 0% (n=16) [95] 3.9% (n=26) [68]
Return to pre-donation status <3 months	71.6% (n=67) [66]

LDLT – living donor liver transplantation
*One patient died of fulminant pulmonary embolism on postoperative day 2; three risk factors existed: overweight, nicotine abuse, and use of oral contraceptives.

Summary of Recipient Outcomes – Efficacy

	CAD Whole Liver Graft	CAD Reduced Size Liver Graft	CAD Split Liver Graft	LDLT
Perioperative Outcomes				
Mean operative time (minutes)			327 (n=39) [63]	387 (n=34) [63]
Mean cold ischemia time (minutes)	522 (SD ± 174) (n=207) [45]		426 (n=39) [63]	179 (n=34) [63] 90 (SD ± 102) (n=43) [45]
Median total ischemia time (minutes)		760 (range 418 to 948) (n=13) [74]		190 (range 105 to 261) (n=15) [74]
Postoperative Outcomes				
Patient survival rate				
3 months		90.0% (n=10) [74]	87.8% (n=49) [16]	95.4% (n=43) [16] 100% (n=15) [74]
12 months			81.6% (n=49) [16]	95.4% (n=43) [16]
Graft survival rate				
3 months		69.2% (n=13) [74]	79.6% (n=49) [16]	90.7% (n=43) [16] 100% (n=15) [74]
12 months			75.5% (n=49) [16]	90.7% (n=43) [16]
Actuarial patient survival rate				
30 days			97.1% (n=39) [63]	94.1% (n=34) [63]
6 months	83% (n=207) [45]			86% (n=43) [45]
1 year	89% (n=125) [10] 83% (n=155) [8] 82.6% (n=2636) [73]	81% (n=128) [10] 54% (n=24) [8] 74.4% (n=438) [73]	94% (n=16) [10] 82.0% (n=89) [73]	97% (n=59) [10] 100% (n=11) [8] 88.4% (n=246) [73]
2 years	81% (n=155) [8]	54% (n=24) [8]		100% (n=11) [8]
3 years	83% (n=207) [45]			86% (n=43) [45]
5 years	85% (n=125) [10] 80% (n=155) [8] 81% (n=207) [45]	75% (n=128) [10] 54% (n=24) [8]	81.6% (n=49) [16] 94% (n=16) [10]	88% (n=43) [16] 95% (n=59) [10] 100% (n=11) [8] 84% (n=43) [45]

	CAD Whole Liver Graft	CAD Reduced Size Liver Graft	CAD Split Liver Graft	LDLT
Postoperative Outcomes				
Actuarial graft survival rate				
30 days			76.9% (n=39) [63]	93.9% (n=34) [63]
6 months	79% (n=207) [45]			76% (n=43) [45]
1 year	78% (n=125) [10] 70.9% (n=2636) [73]	69% (n=128) [10] 61.1% (n=438) [73]	81% (n=16) [10] 60.3% (n=89) [73]	93% (n=59) [10] 75.6% (n=246) [73]
2 years				
3 years	77% (n=207) [45]			74% (n=43) [45]
5 years	72% (n=125) [10] 73% (n=207) [45]	63% (n=128) [10]	76% (n=49) [16] 81% (n=16) [10]	81% (n=43) [16] 89% (n=59) [10] 71% (n=43) [45]
Primary graft non-function	3.4% (n=207) [45] 0% (n=23 grafts) [98]		12.3% (n=49) [16] 7.7% (n=39) [63] (<30 days)	2.3% (n=43) [16] 2.9% (n=34) [63] (<30 days) 2.3% (n=43) [45] 5% (n=20 grafts) [98]
Acute graft rejection		61.5% (n=13) [74]	36.7% (n=49) [16] 2.6% (n=39) [63] (<30 days)	46.5% (n=43) [16] 0% (n=34) [63] (<30 days) 80.0% (n=15) [74]
Re-transplantation			14.3% (n=49) [16]	7% (n=43) [16]
Reoperation	39% (n=207) [45]			42% (n=43) [45]

CAD – cadaveric; LDLT – living donor liver transplantation; SD – standard deviation

Recipient Efficacy Outcomes – Relative Risk, Absolute Risk Reduction, and Weighted Mean Difference

	Treatment Comparisons		
Perioperative Outcomes	**CAD Whole Liver Graft versus LDLT**	**CAD Reduced Liver Graft versus LDLT**	**CAD Split Liver Graft versus LDLT**
Cold ischemia time (minutes)	WMD -432.0 [-470.62 to -393.38] [45]		
Postoperative Outcomes			
Patient survival rate			
3 months		RR 1.11 [0.90 to 1.37]/ARR 0.10 [-0.12 to 0.32] [74]	RR 1.09 [0.96 to 1.23]/ARR 0.08 [-0.04 to 0.19] [16]
12 months			RR 1.17 [1.01 to 1.35]/ARR 0.14 [0.01 to 0.26] [16]
Graft survival rate			
3 months		RR 1.44 [1.01 to 2.08]/ARR 0.31 [0.05 to 0.57] [74]	RR 1.14 [0.96 to 1.35]/ARR 0.11 [-0.03 to 0.25] [16]
12 months			RR 1.20 [1.00 to 1.45]/ARR 0.15 [0.00 to 0.30] [16]
Primary graft non-function	RR 0.69 [0.09 to 5.45]/ARR -0.01 [-0.06 to 0.04] [45] RR 3.43 [0.15 to 79.74]/ARR 0.05 [-0.07 to 0.17] [98]		RR 0.19 [0.02 to 1.52]/ARR -0.10 [-0.20 to 0.00] [16] RR 0.38 [0.04 to 3.51]/ARR -0.05 [-0.15 to 0.05] [63] (<30 days)
Acute graft rejection		RR 1.30 [0.79 to 2.14]/ARR 0.18 [-0.15 to 0.52] [74]	RR 1.27 [0.78 to 2.06]/ARR 0.10 [-0.10 to 0.30] [16] RR 0.38 [0.02 to 9.05]/ARR -0.03 [-0.10 to 0.05] [63] (<30 days)
Re-transplantation			RR 0.49 [0.13 to 1.77]/ARR -0.07 [-0.20 to 0.05] [16]
Reoperation	RR 1.07 [0.72 to 1.58]/ARR 0.03 [-0.13 to 0.19] [45]		

[] = 95% confidence interval
ARR – absolute risk reduction; CAD – cadaveric; LDLT – living donor liver transplantation; RR – relative risk; WMD – weighted mean difference

Summary of Recipient Outcomes – Safety

	CAD Whole Liver Graft	CAD Reduced Liver Graft	CAD Split Liver Graft	LDLT
Perioperative Outcomes				
Mean blood loss (mL)			477 (n=39) [63]	500 (n=34) [63]
Median hospital stay (days)	28 (n=207) [45]			31 (n=43) [45]
Postoperative Outcomes				
Biliary complications	10% (n=207) [45] 0% (n=23 grafts) [98]		4.1% (n=49) [16] 7.7% (n=39) [63] (<30 days)	14% (n=43) [16] 8.8% (n=34) [63] (<30 days) 12% (n=43) [45] 5% (n=20 grafts) [98]
Bowel perforation			4.1% (n=49) [16]	7% (n=43) [16]
Arterial complications			8.2% (n=49) [16]	9.3% (n=43) [16]
Hepatic artery thrombosis	19.8% (n=177 grafts) [71] 13% (n=207) [45]	9.1% (n=186 grafts) [71]	7.4% (n=27 grafts) [71] 7.7% (n=39) [63] (<30 days)	1.9% (n=53 grafts) [71] 2.9% (n=34) [63] (<30 days) 18.6% (n=43) [45]
Hepatic artery outflow complications	19.0% (n=177 grafts) [71]	10.8% (n=186 grafts) [71]	7.4% (n=27 grafts) [71]	1.9% (n=53 grafts) [71]
Portal vein complications	1.1% (n=275 grafts) [57] (>90 days) 9.6% (n=177 grafts) [71] 1.5% (n=207) [45]	8.6% (n=186 grafts) [71]	4.1% (n=49) [16] 3.7% (n=27 grafts) [71] 5.1% (n=39) [63] (<30 days)	2.3% (n=43) [16] 27.1% (n=118 grafts) [57] (>90 days) 1.9% (n=53 grafts) [71] 0% (n=34) [63] (<30 days) 11% (n=43) [45]
Hepatic vein complications	0.7% (n=275 grafts) [57] (>60 days)			1.7% (n=118 grafts) [57] (>60 days)
Venous outflow complications			0% (n=49) [16]	0% (n=43) [16]
Bleeding			8.2% (n=49) [16]	7% (n=43) [16]

CAD – cadaveric; LDLT – living donor liver transplantation

Recipient Safety Outcomes – Relative Risk and Absolute Risk Reduction

	Treatment Comparisons		
Postoperative Outcomes	**CAD Whole Liver Graft versus LDLT**	**CAD Reduced Liver Graft versus LDLT**	**CAD Split Liver Graft versus LDLT**
Biliary complications	RR 1.15 [0.46 to 2.87]/ARR 0.01 [-0.09 to 0.12] [45] RR 3.43 [0.15 to 79.74]/ARR 0.05 [-0.07 to 0.17] [98]		RR 3.42 [0.73 to 16.06]/ARR 0.1 [-0.02 to 0.22] [16] RR 1.15 [0.25 to 5.31]/ARR 0.01 [-0.12 to 0.14] [63] (<30 days)
Bowel perforation			RR 1.71 [0.30 to 9.75]/ARR 0.03 [-0.07 to 0.12] [16]
Arterial complications			RR 1.14 [0.30 to 4.28]/ARR 0.01 [-0.10 to 0.13] [16]
Hepatic artery thrombosis	RR 0.10 [0.01 to 0.68]/ARR -0.18 [-0.25 to -0.11]* [71] RR 1.43 [0.70 to 2.92]/ARR 0.06 [-0.07 to 0.18] [45]	RR 0.21 [0.03 to 1.52]/ARR -0.07 [-0.13 to -0.02]* [71]	RR 0.25 [0.02 to 2.69]/ARR -0.06 [-0.16 to 0.05]* [71] RR 0.38 [0.04 to 3.51]/ARR -0.05 [-0.15 to 0.05] [63] (<30 days)
Hepatic artery outflow complications	RR 0.10 [0.01 to 0.70]/ARR -0.17 [-0.24 to -0.10]* [71]	RR 0.18 [0.02 to 1.28]/ARR -0.09 [-0.15 to -0.03]* [71]	RR 0.25 [0.02 to 2.69]/ARR -0.06 [-0.16 to 0.05]* [71]
Portal vein complications	RR 24.86 [7.76 to 79.59]/ARR 0.26 [0.18 to 0.34]* [57] (>90 days) RR 0.20 [0.03 to 1.44]/ARR -0.08 [-0.13 to -0.02]* [71] RR 8.02 [1.99 to 32.31]/ARR 0.10 [0.00 to 0.20] [45]	RR 0.22 [0.03 to 1.62]/ARR -0.07 [-0.12 to -0.01]* [71]	RR 0.57 [0.05 to 6.07]/ARR -0.02 [-0.09 to 0.05] [16] RR 0.51 [0.03 to 7.83]/ARR -0.02 [-0.10 to 0.06]* [71] RR 0.23 [0.01 to 4.60]/ARR -0.05 [-0.14 to 0.03] [63] (<30 days)
Hepatic vein complications	RR 2.33 [0.33 to 16.35]/ARR 0.01 [-0.02 to 0.04]* [57] (>60 days)		
Venous outflow complications			Not estimable – no events in either group [16]
Bleeding			RR 0.85 [0.20 to 3.61]/ARR -0.01 [-0.12 to 0.10] [16]

[] = 95% confidence interval; *n = number of transplants
ARR – absolute risk reduction; CAD – cadaveric; LDLT – living donor liver transplantation; RR – relative risk

APPENDIX B: SEARCH STRATEGY

Table B.1 lists the databases and information sources searched to identify literature and related materials. The bibliographies of all publications retrieved in full hard copy form were manually searched for relevant references that may have been missed in the database searches.

Table B.1: Databases and search terms used in the search strategy

Database	Platform	Edition	Search Terms[†]
Cochrane Library		Issue 2, 2004	(living OR live OR living donor*) AND (liver transplantation OR liver transplant*) AND (child OR children OR infant OR childhood OR adolescent OR adolescence)
CINAHL	Ovid	January Week 1/1995 to June Week 3/2004	(Exp transplant donors/ OR living donors.mp OR live donor*.mp OR living donors.mp) AND (liver transplantation.mp OR Exp liver transplantation/) Limits: child (newborn infant <birth to 1 month> or infant<1 to 23 months> or preschool child <2 to 5 years> or child <6 to 12 years> or adolescence <13 to 18 years>)
EBM Reviews – ACP Journal Club	Ovid	January 1995 to Mar/Apr 2004	(living donor.mp OR exp living donor/) AND (liver transplantation.mp OR exp liver transplantation/)
EMBASE	Ovid	Week 1/1995 to Week 25/2004	(living donor.mp OR exp living donor/) AND (liver transplantation.mp OR exp liver transplantation/) Limits: child (infant <one year> or child <unspecified age> or preschool child <1 to 6 years> or school child <7 to 12 years> or adolescent <13 to 17 years>)
HealthSTAR	Ovid	January 1995 to May 2004	(living donors.mp OR Exp living donors/ OR live donor.mp OR LDLT.mp OR LURD.mp) AND (liver transplantation.mp OR exp liver transplantation/) Limits: non-Medline, child (newborn infant <birth to 1 month> or infant <1 to 23 months> or preschool child <2 to 5 years> or child <6 to 12 years> or adolescence <13 to 18 years>)

Database	Platform	Edition	Search Terms†
PubMed	http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?holding=icauahslib	June 24, 2004	(living donors OR "live donor*" OR "living donor*" OR LDLT OR LURD) AND (liver transplantation OR "liver transplant*") Limits: all child: 0-18 years (living donors OR "live donor*" OR "living donor*" OR LDLT OR LURD) AND (liver transplantation OR "liver transplant*") AND (publisher [sb] OR in process [sb])
Science Citation Index	Web of Science	June 24, 2004	(living donor* OR live donor) AND liver transplant* AND (child OR children OR infant OR adolescent OR childhood OR adolescence)
NHS CRD (UK)	http://nhscrd.york.ac.uk	June 24, 2004	liver transplantation AND living donors
Biological Abstracts	SilverPlatter	January 1995 to December 2003	living donor liver AND (children OR child OR pediatric OR adolescent* OR adolescence) Limits: meeting-abstract
HTA agencies, research registers, and guidelines sites		June 24, 2004	Searched as per the CCOHTA HTA Checklist.
Additional Internet sites checked and search engines used		June 24, 2004	ECRI and the NEOS library consortium. www.google.com www.copernic.com

†Searches limited to human and English language studies published from 1995 onwards

Note: * is a truncation character that retrieves all possible suffix variations of the root word e.g. surg* retrieves surgery, surgical, surgeon, etc. In databases accessed via the Ovid platform the truncation character is $

APPENDIX C: METHODOLOGY

Inclusion and exclusion criteria

Types of Studies

Only systematic reviews, or comparative studies with at least ten patients in each study arm, published in English from 1995 onwards were included for analysis. Case series studies reporting outcomes for at least ten donors were also included. An article was deemed to be a systematic review if it met all of the following criteria as defined by Cook et al. [99]:

1) focused clinical question;

2) explicit search strategy;

3) use of explicit, reproducible and uniformly applied criteria for article selection;

4) critical appraisal of the included studies;

5) qualitative or quantitative data synthesis.

Participants

Data were collected on children (< 18 years of age) undergoing liver transplantation for any indication. Patients receiving another organ transplant at the same time as the liver graft were excluded. Animal studies were not included. Data were also collected on living donors whose donated liver graft was transplanted into a child (< 18 years of age). In cases where the age of the liver transplant recipients was not clearly defined, the study was excluded.

Index Intervention

Any type of liver transplant where the graft is harvested from a living donor.

Comparator Intervention

Any type of liver transplant where the graft is harvested from a cadaveric donor. Data were only included if the type of cadaveric graft was specifically stated, e.g. whole, split or reduced size, and if results were reported separately for each graft type.

Outcomes

The included studies must contain information on at least one of the following outcomes: perioperative and postoperative mortality or morbidity, graft survival, convalescence interval, quality of life, and liver function. The comparative studies must report at least one of these outcomes for both the index and comparator intervention.

Statistical Calculations

Where possible, the relative risk (RR), absolute risk reduction (ARR), and weighted mean difference (WMD) plus 95% confidence intervals (CI) were calculated using RevMan 4.2.2 (The Cochrane Collaboration 2003). For these calculations the 'control' was the cadaveric graft procedure. Results were interpreted such that the index intervention was better than the control intervention when the upper limit of the 95% CI was <1 for the RR and <0 for the ARR and WMD. The converse was true when the lower limit of the 95% CI was >1 for the RR and >0 for the ARR and WMD.